

In the Claims:

Cancel Claims 1-31 without prejudice.

Add the Following New Claims 32-73:⁴

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- 1 Claim 32. A method for abbreviating an entry comprising the acts of:
- 2 a) determining a character type;
- 3 b) providing the entry;
- 4 c) removing from said entry at least one character having a first character
- 5 type if the entry includes the at least one character and if the character
- 6 type is the first character type;
- 7 d) removing from said entry at least a second character having a second
- 8 character type if the entry includes the at least second character and if the
- 9 at least second character is the second character type; and
- 10 e) removing from said entry at least a third character having a third character
- 11 type if the entry includes the at least third character and if the at least third
- 12 character is the third character type.
- 1 Claim 33. The method of Claim 32 wherein the first character type includes spaces.
- 1 Claim 34. The method of Claim 32 wherein the second character type includes lower
- 2 case vowels.
- 1 Claim 35. The method of Claim 32 wherein the third character type includes lower
- 2 case letters.

1 Claim 36. The method of Claim 33 further including the acts of setting a
2 predetermined width for said entry;
3 testing a remainder entry after step (c) against the predetermined width; and
4 displaying the remainder entry if a width of said remainder entry is equal or less
5 than the predetermined width.

1 Claim 37. The method of Claim 36 further including the act of aborting acts (d) and (e)
2 if the width of the remainder entry is less than the width of the predetermined entry.

1 Claim 38. The method of Claim 34 further including the acts of setting a
2 predetermined width for said entry;
3 testing a remainder entry after step (c) against the predetermined width; and
4 displaying the remainder entry if a width of said remainder entry is equal or less
5 than the predetermined width.

1 Claim 39. The method of Claim 38 further including the act of aborting acts (d) and (e)
2 if the width of the remainder entry is less than the width of the predetermined entry.

1 Claim 40. The method of Claim 35 further including the acts of setting a
2 predetermined width for said entry;
3 testing a remainder entry after step (c) against the predetermined width; and
4 displaying the remainder entry if a width of said remainder entry is equal or less
5 than the predetermined width.

1 Claim 41. The method of Claim 40 including the act of aborting acts (d) and (e) if the
2 width of the remainder entry is less than the width of the predetermined entry.

sub 1
2 (c2)
3 Claim 42. A method for reducing an amount of horizontal space required when
4 displaying a plurality of column on a display screen, at least one column of the plurality
5 of columns including at least one entry containing text data, the method comprising the
6 steps of:
7 (a) determining a character type;
8 (b) obtaining the at least one entry; and
9 (c) abbreviating a width of the at least one entry by
10 (c1) removing at least one space if the at least one entry includes the at
11 least one space and if the character type is a first character type, the first character type
12 being a space; and
13 (c2) removing at least one character having a second character type if
14 the at least one entry includes the at least one character and if the character type is the
15 second character type;
16 (c3) removing at least one lower case letter if the at least one entry
includes the at least one lower case letter and if the character type is a third character
type, the third character type being a lower case letter.

1 43. A method for reducing an amount of horizontal space required when displaying a
2 plurality of columns on a display screen, at least one column of the plurality of columns
3 having at least one entry containing text data, the method comprising the steps of:
4 (a) obtaining the at least one entry from the at least one column;
5 (b) abbreviating a width of the at least one entry;
6 (c) determining if there is another entry containing text data;
7 (d) repeating steps (b) and (c) until all of the at least one entry of the at least
8 one column are abbreviated; and
9 (e) displaying the at least one column having the at least one abbreviated
10 entry.

1 44. The method of claim 43 wherein the at least one entry includes at least one
2 column heading.

sub 23
45. The method of claim 44 wherein the at least column heading includes a first
plurality of characters; and wherein abbreviating step (b) further includes the step of:
3 (b1) removing at least one character of a second plurality of characters if the at
4 least one column heading includes the at least one character.

1 46. The method of claim 45 wherein the second plurality of characters further
2 includes a plurality of lower case vowels.

1 sub 4
b 47. The method of claim 44 wherein the at least one column heading includes a
2 plurality of characters, the plurality of characters being capable of containing at least
3 one lower case character; and wherein abbreviating step (b) further includes the step
4 of:
5 (b1) removing the at least one lower case character if the at least one column
6 heading includes the at least one lower case character.

1 48. The method of claim 44 wherein the at least one column heading includes a
2 plurality of characters, the plurality of characters being capable of containing at least
3 one space; and wherein abbreviating step (b) further includes the step of:
4 (b1) removing the at least one space if the at least one column heading
5 includes the at least one space.

1 49. A method for reducing an amount of horizontal space required when displaying a
2 plurality of column on a display screen, at least one column of the plurality of columns
3 including at least one entry containing text data, the method comprising the steps of:
4 (a) determining a character type;

- 5 (b) obtaining the at least one entry; and
6 (c) abbreviating a width of the at least one entry by
7 (c1) removing at least one character having a first character type if the
8 at least one entry includes the at least one character and if the character type is the first
9 character type;
10 (c2) removing at least one lower case character if the at least one entry
11 includes the at least one lower case character and if the character type is a second
12 character type, the second character type being a lower case character; and
13 (c3) removing at least one space if the at least one entry includes the at
14 least one space and if the character type is a third character type, the third character
15 type being a space.

1 50. The method of claim 49 wherein the at least one entry further includes at least
2 one column heading.

1 51. The method of claim 50 further comprising the step of:

- 2 (d) repeating steps (b) and (c) for each of the at least one column for a
3 particular character type of the plurality of character types.

1 52. The method of claim 51 further comprising the step of:

- 2 (e) repeating steps (a), (b), and (c) for each of the at least one columns for
3 each of the plurality of character types.

1 53. The method of claim 52 wherein the at least one character of the plurality of
2 characters removing step (c1) further includes the step of:

- 3 (c1i) removing the at least one character having the first character
4 type if the at least one column heading includes the at least one character and if the at
5 least one column heading is wider than a particular column width.

1 54. The method of claim 53 wherein the at least one lower case character removing
2 step (c2) further includes the step of:

3 (c2i) removing the at least one lower case character if the at least
4 one column heading includes the at least one lower case character, if the character
5 type is the second character type, and if the at least one column heading is wider than
6 the particular column width.

1 55. The method of claim 53 wherein the at least one space removing step (c3)
2 further includes the step of:

3 (c3i) removing at least one space if the at least one column
4 heading includes the at least one space, if the character type is the third character type,
5 and if the at least one column heading is wider than the particular column width.

1 56. The method of claim 55 wherein the abbreviating step (c) further comprises the
2 step of:

3 (c4) truncating the at least one column heading if the width of the at least one
4 column heading is greater than the particular column width and if the at least one
5 column heading does not contain any character of the first character type, the second
6 character type, or the third character type.

1 57. A computer-readable medium containing a program for reducing an amount of
2 horizontal space required when displaying a plurality of columns on a display screen,
3 the plurality of columns including at least one column having at least one entry
4 containing text data, the program comprising instructions for:

5 obtaining the at least one entry of the at least one column;
6 abbreviating a width of the at least one entry;
7 determining if there is another entry containing text data;

8 repeating the instructions for abbreviating the at least one entry and determining
9 if there is another entry containing text data until all of the at least one entry is
10 abbreviated; and
11 displaying the at least one abbreviate entry of the at least one column.

1 58. The computer-readable medium of claim 57 wherein the at least one entry
2 includes at least one column heading.

1 59. The computer-readable medium of claim 58 wherein the at least one column
2 heading include a first plurality of characters; and wherein the instructions for
3 abbreviating the at least one column heading further includes instructions for:
4 removing at least one character of a second plurality of characters if the at least
5 one column heading includes the at least one character.

1 60. The computer-readable medium of claim 59 wherein the second plurality of
2 characters further includes a plurality of lower case vowels.

1 61. The computer-readable medium of claim 58 wherein the at least one column
2 heading includes a first plurality of characters, the plurality of characters being capable
3 of containing at least one lower case character; and wherein the instructions for
4 abbreviating the column heading further includes instructions for:
5 removing the at least one lower case character if the at least one column
6 heading includes the at least one lower case character.

1 62. The computer-readable medium of claim 58 wherein the at least one column
2 heading includes a first plurality of characters, the plurality of characters being capable
3 of containing at least one space; and wherein the instructions for abbreviating the at
4 least one column heading further includes instructions for:

5 removing the at least one space if the at least one column heading includes the
6 at least one space.

1 63. A computer-readable medium containing a program for reducing an amount of
2 horizontal space used when displaying a plurality of columns on a display screen, at
3 least one column of the plurality of columns having at least one entry containing text
4 data, the at least one entry including a first plurality of characters, the program
5 comprising instructions for:

6 (a) determining a character type;
7 (b) obtaining the at least one entry of the at least one column; and
8 (c) abbreviating a width of the at least one entry by
9 (c1) removing at least one character of a second plurality of characters
10 having a first character type if the at least one entry includes the at least one character
11 and if the character type is the first character type;

12 (c2) removing at least one lower case character if the at least one entry
13 includes the at least one lower case character and if the character type is a second
14 character type, the second character type being a lower case character; and

15 (c3) removing at least one space if the at least one entry includes the at
16 least one space and if the character type is a third character type, the third character
17 type being a space.

1 64. The computer-readable medium of claim 63 wherein the at least one entry
2 includes at least one column heading.

1 65. The computer-readable medium of claim 64 further comprising instructions for:

2 (d) repeating the instructions (b) and (c) for a particular character type of the
3 plurality of character types.

1 66. The computer-readable medium of claim 65 further comprising instructions for:
2 (e) repeating the instructions (a), (b), and (c) for each of the plurality of
3 columns for each of the plurality of character types.

1 67. The computer-readable medium of claim 66 wherein the instructions for
2 removing the at least one character of the plurality of characters (c1) further includes
3 instructions for:

4 (c1i) removing the at least one character of a second plurality of
5 characters having the first character type if the at least one column heading includes
6 the at least one character, if the character type is the first character type, and if the at
7 least one column heading is wider than a particular column width.

1 68. The computer-readable medium of claim 67 wherein the instructions for
2 removing the at least one lower case character (c2) further includes instructions for:

3 (c2i) removing at least one lower case character if the at least
4 one column heading includes the at least one lower case character, if the character
5 type is the second character type, and if the at least one column heading is wider than
6 the particular column width.

1 69. The computer-readable medium of claim 68 wherein the instructions for
2 removing the at least one space (c3) further includes instructions for:

3 (c3i) removing at least one space if the at least one column
4 heading includes the at least one space, if the character type is the third character type,
5 and if the at least one column heading is wider than the particular column width.

1 70. The computer-readable medium of claim ⁽²⁾69 wherein the instructions for
2 abbreviating the at least one column heading (c) further includes instructions for:

3 (c4) truncating the at least one column heading if the at least one column
4 heading is wider than the particular column width and if the at least one column heading
5 does not contain any character of the first character type, the second character type or
6 the third character type.

1 71. A system for reducing an amount of horizontal space used when displaying a
2 plurality of column on a display screen, at least one column of the plurality of columns
3 having at least one entry containing text data the system comprising:
4 means for obtaining the at least one entry of the at least one column;
5 means coupled with the obtaining means for abbreviating a width of the at least
6 one entry; and
7 means coupled with the abbreviating means for displaying the at least one entry.

1 72. The system of claim 71 wherein the at least one entry includes at least one
2 column heading.

1 73. The system of claim 72 wherein the at least one column heading further includes
2 a plurality of characters and wherein the abbreviating means further comprise:
3 means for determining a character type for at least one of the plurality of
4 characters, the character type including a first character type, a second character type,
5 and a third character type;
6 means coupled with the determining means for removing the at least one of the
7 plurality of characters if the character type is the first character type and if the width of
8 the at least one column heading is greater than a particular width;
9 means coupled with the determining means for removing the at least one
10 character if the character type is a second character type and if the width of the at least
11 one column heading is greater than the particular width, the second character type
12 being a lower case character;